

Chapter VII-B Water Access and Blueways

One summer night, out on a flat headland, all but surrounded by the waters of the bay, the horizons were remote and distant rims on the edge of space. —Rachel Carson

Whether on Virginia's Chesapeake Bay, Atlantic Ocean, or the Commonwealth's lakes, rivers or streams, recreational waters are places of solitude, restful settings for picnicking, walking, jogging, sunbathing, swimming, fishing, surfing, boating, sailboarding and camping. With water access being one of the recreation resources in greatest demand throughout the Commonwealth, planning for these various types of water access is a priority. Because much of Virginia's shoreline is privately owned, to meet the growing demands on water resources indicated in the 2006 *Virginia Outdoors Survey* (2006 VOS), partnerships between private and public landowners are a necessity.

For the purposes of this plan, water access involves both motorized and non-motorized watercraft, fishing piers, bank fishing, beaches and natural water bodies suitable for swimming, natural area access, places to view the water, as well as water trails and blueways. "Water trails" and "blueways" are terms used synonymously in this plan. These resources follow linear river and stream corridors and often link all these types of water access together. Water trails and blueways are recognized for offering an array of recreational opportunities, both from the water and the land.

Based on the 2006 VOS, more than half of the survey participants felt the most needed outdoor recreation

opportunities include public access to state waters for boating, fishing, swimming and beach use. Participation rates for activities involving water access are listed below. Since planning for the *Virginia Outdoors Plan* began in 1965, fishing has remained a favorite outdoor recreation activity and continues to increase in popularity with each survey. Combined saltwater and freshwater fishing grew 8.7 percent between 2002 and 2006. Over the past five years, kayaking and canoeing has increased more than other water-dependent outdoor recreation activities with a 17.8 percent increase in participation between 2002 and 2006.

According to the 2006 VOS, swimming, sunbathing, fishing and boating are respectively the fifth, sixth, seventh, and 10th most popular outdoor recreational activities. Additional access to Virginia's rivers and streams is necessary to meet water-related recreational demands. To help meet this statewide public access need, lands should be acquired or use agreements arranged. Whenever roads cross water bodies or road improvements are planned, the potential for parking, fishing and boat launches should be evaluated. Appropriate portages designed around dams and other river obstacles are also needed to ensure safe recreational use on waterways.



Sixty-one percent of all swimming takes place in outdoor pools. Photo by City of Richmond Parks, Recreation & Community Facilities.

Table VII-2 Water-based Recreation

Activity	Participation Rate
Sunbathing at a Beach	37% of Virginia households participate
Swimming	44% of Virginia households participate
<u>Type of swimming</u>	<u>Ranking by type of swimming</u>
Outdoor Pool	61%
Indoor Pool	40%
Lake	23%
River	19%
Chesapeake Bay	19%
Other Place	35%
Boating	25% of Virginia households participate
<u>Type of boating</u>	<u>Ranking by type of boating</u>
Canoeing and Kayaking	10%
Power Boating	9%
Tubing	5%
Jet skiing/ Personal Watercraft	5%
Water skiing	4%
Sailing/Sailboarding	4%
Rafting	2%
Fishing	26% of Virginia households participate
<u>Type of fishing</u>	<u>Ranking by type of fishing</u>
Freshwater Fishing	20%
Saltwater Fishing	16%

(2006 Virginia Outdoors Survey)

Findings

General

- The 2006 *Virginia Outdoors Survey* shows a 17.8 percent increase in combined water access needs for Bay, river, stream and ocean activities and for outdoor swimming opportunities from 2002 to 2006.
- Regional authorities have demonstrated effectiveness in increasing and managing water access. For example, since the General Assembly authorized the establishment of Public Access Authorities on the Northern Neck and Middle Peninsula, these entities have been addressing the regional need for additional public access and management of access to waters of the state.
- The Chesapeake Bay Agreement calls for an increase of 30 percent (for a total of 66 public

access sites) in the tidal region of Virginia by 2010. Since 2000, 36 public water access sites have been added, marking a 61 percent increase in public access in tidal Virginia.

- Many of the recreational rivers and streams of the state do not have adequate public access and there is no adequate funding mechanism to help address the variety of water access needs. Increasingly heavy use of popular water resources indicates a need for increased public access. Many water access sites struggle with conditions of overcrowding, overfishing, trespassing, littering and conflicts between user types.
- Recreational use of Virginia's waters is safer if enhanced by the presence of law enforcement.

Boating

- A formal process for evaluating, developing and managing public access sites for boating is needed.

Beaches

- There are currently 29 miles of public tidal beach-front land in Virginia and less than 1% of Virginia's shoreline is in public ownership.
- Beach advisories were posted on 11 beaches for 20 calendar days in 2004, on 8 beaches for 42 calendar days in 2005, and on 4 beaches for 40 calendar days in 2006.

Fishing

- Bank and pier fishing is sought after in all localities along rivers, streams, lakes and in the Bay and ocean.



Wheelchair-accessible fishing at Lake Anna State Park. Photo by DCR.

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- Appropriate bank and pier fishing opportunities are needed to protect water and fisheries resources.
- There is a need for additional wheelchair-accessible fishing opportunities.

Water trails

- Approximately 1,160 miles of water trails exist in Virginia, with another 1,812 miles proposed. The establishment of the Captain John Smith Chesapeake National Historic Trail added significant water miles.
- Water trails are popular recreational resources that provide access along rivers, streams, the Bay and lakes while providing educational opportunities for learning about local and regional history and supporting local economies.
- Adequate support facilities at reasonable intervals along water trails encourage proper use and maintenance of water trails, and discourage public use of adjoining private lands.
- Coastal Geospatial and Educational Mapping System (Coastal GEMS) program may be used to identify resources and create water trail maps. Water trail maps provide an opportunity for resource managers to remind the user about stewardship responsibilities and outdoor ethics.
- The National Oceanic and Atmospheric Administration (NOAA) Chesapeake Interpretive Buoy project will revolutionize how water trails are marked and used. The buoys will collect real-time data and emit historical data. See <http://noaa.chesapeakebay.net/CbayBuoySystem.aspx>.
- Railroads parallel many water bodied and severely limit access to these resources.

Recommendations

General

- The Virginia departments of Conservation and Recreation (DCR) and Game and Inland Fisheries (DGIF) should work with local governments to identify and increase water access opportunities to Virginia's southern rivers, as well as to meet the commitments of the Chesapeake Bay Agreement for water access.
- Local governments should be involved in providing water access opportunities. City, county and town governments should take the initiative to provide water access areas and facilities.

- State and federal agencies should concentrate on access to rivers constituting recreational resources of greater than local significance.
- Local public and private cooperation should be encouraged to provide water access. Park and recreation planners should identify corporate owners of riparian lands in their localities and determine their willingness to make land available for the development of water access facilities.
- DCR should continue to comment on highway projects, including all state and federally funded bridge projects, to encourage public access to the state's waters. If DCR knows that a locality wants an alternative bridge design at a particular location, this will be included in the comments that are provided to VDOT.
- The state should continue to develop public access authorities and regional park authorities to facilitate additional public access acquisition and partnerships.
- Minimum development standards for public water access sites should address signage, maintenance, trash, parking and public restroom facilities in high use areas.
- Users should abide by a code of ethics to cooperate with one another to resolve conflicts and maximize use of the water resource.
- Outfitters, users and local government officials should consider developing management plans to address problems such as: user conflicts, trespassing, litter, noise and sanitation issues on blueways and on public beaches.
- The Virginia Department of Environmental Quality (DEQ) should extend the Coastal GEMS mapping tool west of the Bay area.
- DGIF and DCR should work with law enforcement to develop partnership plans addressing water access issues, especially along water trails. Consider assigning a trained law enforcement officer on and along the river and at formal and informal access points.

Boating

- A state source for funding, or partnership for funding, the development of access points and support facilities for paddlers needs to be established that is an addition to federal motor boat access funds or other existing programs. Planning for public sanitation at existing and proposed sites should be prioritized.



Boating and fishing are top ranked recreational activities. Photo by Janit Llewellyn.

- Wherever a renovation, relocation or development project is planned for a highway that crosses a recreational body of water, the roadway should be evaluated to determine its suitability for public access, especially for boaters. Old ferry crossing and landing sites and bridge sites should be evaluated for their suitability to provide water access and water related recreation, particularly in the coastal area of Virginia.
- DGIF and DCR should study the suitability for powerboat access and recreational boating capacity on rivers showing a need for additional powerboat access.

Beaches

- Federal, state and local governmental agencies should continue acquiring and developing public access to beaches. Cooperative agreements among localities and other agencies, as well as private landowners, are encouraged in order to meet the increasing need for public access to beaches and other water-related recreational resources.
- Public agencies should maintain access to existing public beaches that may be jeopardized by changes in climate, land use and development activities.

- All agencies should provide adequate seasonal support facilities and services, such as restrooms, concessions, parking and maintenance at existing public water and beach access areas.

Fishing

- Water trails should include points for informal bank fishing.
- Fishing should be considered in bridge design, especially in urban environments.
- Local and regional parks should consider wheelchair-accessible fishing areas and integration of fishing into parks and recreation programming.

Water trails

- Local and regional governments should consider managing navigable rivers of the state as water trails. Public access areas and support facilities should be developed at appropriate intervals along these rivers. Water trail brochures should be developed that map access points, use areas, campsites, hazards and the source for flow-level data. DCR should work with local and regional representatives to produce brochures and maps for each river showing access points, day use and camping areas, resupply points, hazards, points of interest along the river and other trip planning information. This infor-

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mation should be integrated into the expanding Coastal GEMS program.

- DCR should develop a water trail feasibility and assessment toolbox for local governments and non-profit organizations. This toolbox should include assessment criteria to measure the feasibility of establishing water trails, tips for minimizing user conflicts, and considerations regarding the carrying capacity of the resource. These criteria should be applied in developing regional priorities for water trail implementation.
- DCR should partner with DGIF and DEQ to develop a Geographic Information System (GIS) database for recreational water access to address user information needs, especially along water trails and blueways.
- Site managers should post signs at each public access area showing the range of safe river use.
- VDOT should install signs for boaters on waterway bridges that identify the road crossing the bridge.
- Local jurisdictions should encourage both private and public landowners to operate rest stops and boat-in-only campgrounds where needed on those areas of Virginia rivers that are capable of accommodating such use.
- Local, regional and state water trail supporters should work with the railroad industry to develop criteria and a process for evaluating and implementing access sites over or adjacent to railroad rights-of-way along Virginia's rivers and streams.
- DCR and the regional planning district commissions should work with the American Canoe Association and other nonprofit organizations to increase awareness and market the benefits of water trails and water access.
- Virginia should develop a system of measuring river miles in collaboration with other states and the Army Corps of Engineers.
- Outfitters and guides should follow Professional Paddle Sports Association guidelines.
- A partnership of federal, state, regional and local organizations should implement the goals for the Potomac Heritage National Scenic Trail (PHNST) in Virginia's Lower Potomac River corridor.
- DCR, regional and local organizations should continue to support the Captain John Smith National Historic Water Trail in Virginia to promote stewardship of Virginia's rivers and the Chesapeake Bay. A comprehensive access study should be conducted

to determine potential locations for visitor services along the water trail.

- The American Canoe Association's recommended water trails for 2006 includes the Lower Mattaponi-Pamunkey Canoe Trail.

Boating

The DGIF Boating Access Program traverses the Commonwealth providing access to all river systems, the Chesapeake Bay and the Atlantic Ocean. The program's success is due to its many partners. DGIF owns, operates or cooperates on 219 facilities. These include more than 90 facilities on local property, and approximately 55 sites at bridge crossings and terminated roads at waters edge in cooperation with the Virginia Department of Transportation (VDOT). These partners also support the boating access program by contributing to the operations and maintenance at certain sites. The remaining sites are owned, constructed, operated and maintained by DGIF.

The boating access program has sites located in 84 jurisdictions and on 106 water bodies. These facilities provide 419 launch lanes, 105 courtesy piers, 11 boat slides, 148 river access sites, 62 lake access sites, seven Chesapeake Bay access sites and two Atlantic Ocean access sites. The program has 31 saltwater sites and 188 freshwaters sites. There are more than 248,000 active registered boats in Virginia and on many weekends the facilities are full with overflow parking along the entrance roads. The boating access program provides boat launches for non-power sites along upland rivers and streams and facilities for powerboats on saltwater or open freshwater. For boating access sites and information, see the DGIF website at www.dgif.virginia.gov/boating/access.

The DGIF Boating Access Program works closely with a very important partner- the U.S. Fish and Wildlife Service. In 1950, Congress passed the Federal Aid in Sport Fish Restoration Act, also known as the Dingell-Johnson or D-J Program. This Act created the Sport Fish Restoration Program administered by the U.S. Fish and Wildlife Service. The objective of the program is: "To support activities designed to restore, conserve, manage, or enhance sport fish populations and the public use and benefits from these resources; and to support activities that provide boating access to public waters." Since the revenue to support this program is generated from a federal tax on gasoline used to fuel motorboats, the funds from this program can only be used on boating facilities for motorboat access.

While direct participation is limited to fish and wildlife agencies, the general public ultimately benefits. States are reimbursed up to 75 percent of the total project cost. Since 1986, DGIF has invested almost \$11 million of Sport Fish Restoration Funds in the development and maintenance of boating access facilities. These funds have been invested to develop 40 sites in more than 35 cities and counties, of which 26 sites provide access to freshwater and 14 sites provide access to saltwater. These 40 facilities provide 78 lanes to launch and retrieve boats and approximately 2,000 spaces to park a vehicle with trailer. DGIF has invested almost \$4 million of program funds for the maintenance approximately 150 boating access sites each year.

DGIF has a prescribed process for evaluating and selecting boating access facilities. Some of the criteria used to evaluate sites are: sufficient land control and area to support the facility, water depth, environmental conditions, adjacent land use, terrain and topography, proximity to roads and other access sites, development and maintenance funding, and partners or cooperators. DGIF offers technical assistance to local governments and the general public when building access facilities and boat ramps. (www.dgif.virginia.gov/boating/bldg_boat_ramps.html)

Public need for boating access to the waters of our state is growing, and DGIF is continuing to seek, evaluate and select sites to develop. Boating access users are hunters, bird watchers, anglers, paddlers and powerboaters, wildlife enthusiasts, eco-tourists, conservationists, preservationists. They are every citizen of our great Commonwealth, and many of the visitors are from out of state.

America's Waterway Watch

www.americaswaterwaywatch.org

America's Waterway Watch is a public outreach program encouraging participants to simply report suspicious activity to the Coast Guard or other law enforcement agencies. America's Waterway Watch encourages recreational users to adopt a heightened sensitivity toward unusual events or suspicious behavior encountered around ports, docks, marinas, river shorelines, reservoirs, beaches and waterfront communities. The Coast Guard and local first responders cannot do the job alone. To report suspicious activity, call the National Response Center (800) 424-8802 or (877) 24-WATCH. In case of immediate danger to life or property call 911 or Marine Channel 16.



Boating on the tidal rivers. Photo by Virginia Tourism Corporation.

Tidal water access

Almost 2,400 square miles of the Chesapeake Bay, several smaller bays and estuaries, and Virginia's 115-mile Atlantic Coast have a total of more than 5,300 miles of shoreline. Collectively this represents one of the state's most important resources. It would seem that this abundance of water in the Bay and its major tributaries would provide more than adequate area to meet recreational demand. However, only one percent of the shoreline is publicly owned and available for public use. While commercial marinas provide the bulk of boating access facilities, there are still not enough access points, including those in the public sector, to meet the increasing demand.

In June 2000, governors of the Bay states signed the 2000 *Chesapeake Bay Agreement* to improve the quality of the bay and its tidal tributaries. One of the agreement's major initiatives is improving public access to the tidal waters of the Bay. This commitment calls for a 30 percent increase in enhanced or new access sites, including boat ramps to the waters of the Bay region. This commitment will require substantial resources for the future improvement of water-dependent and water-enhanced recreational opportunities. An integral component of that initiative was the 2000 *Chesapeake Bay & Susquehanna River*

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Public Access Guide, which contains maps and matrices showing the location of public access sites along with the facilities available at each. This map was updated in 2006 and distributed widely throughout the Bay states. This map serves as the baseline from which progress is measured in meeting access commitment.

Inland water access

Virginia's large lakes provide a myriad of recreational opportunities, including power boating, sailing and water skiing. The 2006 VOS measured more than 20 million annual activity days of demand for the combined fresh water activities. This represents a dramatic increase in use from that reported in the 2000 survey.

Historically, a majority of the public's recreational access to rivers and streams has been informal, consisting primarily of road rights-of-way at bridge crossings and some access across private lands with owner permission. In the past, these informal sites, in combination with facilities provided by DGIF and others, were adequate to satisfy the demand. However, dramatic increases in use during the last few years, coupled with the loss of a number of key informal access sites, has resulted in increased crowding in some areas and diminished use of other key stream segments. There is a need for a formal program that identifies, acquires, develops and manages inland public water access sites.

Water safety

DGIF has responsibility for water safety and fishing regulations throughout the Commonwealth. Localities supplement the work of the game wardens with local law enforcement to address concerns outside boating and fishing violations. In tidal waters, the Virginia Marine Resource Commission (VMRC) has jurisdiction for boater safety and regulations (see Chapter IX. Resource Agencies).

Virginia fishing and boating regulations may be found at www.dgif.virginia.gov.

Water safety planning issues are important for all recreational access. Safety factors vary with each resource, but typically include:

River traffic patterns – Recreation boaters and sportsmen should give special consideration to commercial boat traffic. Planners of water access need to consider the needs of recreational motorized and non-motorized traffic and ultimate river traffic patterns when planning facilities.

River hazards – Natural river hazards such as dams and underwater obstructions need to be identified and accommodations made for safe portages.

Tidal changes and winds – In planning boating facilities, tidal changes must be accommodated in the facility design. The presence of winds and tides varies with resources, but should always be considered during design and water trail trip planning.

Beaches

Beach resources are limited and dynamic. Because beaches are in high demand for human recreational uses, and also provide habitat for a variety of species, balanced planning efforts for beaches are essential. Management of beach resources for environmental and recreational reasons becomes increasingly important as more development occurs along Virginia's shoreline. The statewide beach inventory shows approximately 2,047 acres of beach available for public access, including beaches in coastal areas, as well as those located on lakes, streams and rivers west of the fall line. Man-made and natural beaches, including those enhanced by beach nourishment, are also included.

A beach is defined as a strip of sand or gravel along the shore separating land from water. To gain beach designation, this strip must extend 25 feet in width between the dune or bank and landward of the mean high tide or normal high water. Due to the forces of nature, most beaches do not maintain a constant shoreline profile.

Virginia's tidal beaches are predominantly on the lower Chesapeake Bay and Atlantic Ocean. Beaches on the Bay and on lower sections of rivers tend to be sandy,



Lake Anna State park beach overlook. Photo by DCR.

while those on the upper reaches of the rivers may have a thin layer of sand over a mud bottom. Other beaches listed in the Virginia inventory include a few sand and gravel bars along river corridors and man-made beaches created on lakes and ponds. Standards for beach design for public access are available in the *Chesapeake Bay Area Public Access Technical Assistance Report*, published in October 1990, and available from the DCR.

Non-coastal beaches are not as fast to change as those beaches located along the Atlantic Ocean, the Chesapeake Bay or the Commonwealth's tidal tributaries. Often these beaches are in recreational areas and parks that also offer camping, boating, fishing and hiking. The design of man-made beaches should consider the optimum use of the planned facility, and safe swimming conditions should be a priority. Avoiding potential use conflicts between boaters and fishermen is essential in locating swimming beaches in recreational areas.

Beaches Open to the Public in State Parks

Douthat State Park
Hungry Mother State Park
Bear Creek Lake State Park
Twin Lakes State Park
Fairy Stone State Park
Kiptopeke State Park
Smith Mountain Lake State Park
Lake Anna State Park
Breaks Interstate Park
Holliday Lake State Park
Westmoreland State Park
First Landing State Park

Chippokes Plantation State Park, Hughlett Point and William B. Trower Bayshore natural area preserves, and Parkers Marsh Natural Area also have beaches; however, recreational use is not encouraged at these sites because of the sensitivity of the beach environments.

The 2006 VOS indicates that 44 percent of the Commonwealth's population sunbathe and relax at the beach. Sunbathing at beaches is ranked as the fourth most popular outdoor recreation activity in Virginia. The statewide inventory of beaches is 2,047 acres, while statewide demand is more than 1,883 acres, which shows a surplus of beach access. However, this surplus does not take into account that access to beaches such as Back Bay National Wildlife Refuge, Fort Story and other military sites, as well as False

Cape State Park is very limited. Of the people using the beaches, 73 percent depend upon a public beach. Virginia Beach is home to more than 13 miles of Virginia's 29.3 miles of public tidal beaches. Maintaining maximum beach access and increasing beach size in Virginia's state parks ensures maximum accessibility to state-owned beaches.

There is much less public access to beaches than needed to meet demand indicated in the 2006 VOS demand, supply and needs analysis. Much of the suitable beachfront in the Tidewater, Virginia area is private or in military use. Although there is adequate beach area to meet local demand in coastal areas (regions 17- Northern Neck, 18- Middle Peninsula, 22- Accomack and 23- Hampton Roads), the large influx of beachgoers from outside these areas increases the demand on existing resources beyond the existing land capacity.

Shoreline erosion of beaches may affect their suitability for recreation. DCR lends technical assistance for reducing shoreline erosion and enhancing recreational beach quality. If a beach is a locally-owned public beach as defined by the *Code of Virginia*, the Board of Conservation and Recreation provides assistance. There are approximately 29 miles of public tidal beach identified by the board, as shown in the following table.



Fishing is ranked seventh in the 2006 Virginia Outdoors Survey.
Photo by Stuart Connock.

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Table VII-3 Public Tidal Beaches*

Locality	Site/Location	Miles	Feet
Accomac County	Assateague Island National Seashore	8.3	43,825
Northampton County	Kiptopeke State Park	1.1	5800
Cape Charles	Cape Charles	0.500	2,640
	Castlewood Park		
	Central Beach		
Colonial Beach	Total:	2.500	13,200
Gloucester	Gloucester Point	0.18	975
	Buckroe	0.760	4,000
	Grandview	2.460	13,000
	Salt Ponds	.760	4,000
Hampton	Total:	3.980	21,000
King George	Wayside Park Beach	0.27	1,400
Mathews	Diggs	0.17	900
Middlesex	Canoe House Landing	0.04	185
	Anderson Park	0.280	1,500
	Hilton Riverfront Park	0.100	500
	Huntington Park	0.100	550
	Lincoln-King Park	0.280	1,500
Newport News	Total:	0.580	4,050
Norfolk	Willoughby Spit to East Ocean View	7.40	39,072
Northumberland	Vir-Mar Beach	0.02	80
Stafford	Aqua-Po Beach	0.300	1,580
	Croatan Beach	0.82	4,330
	Ocean Park	1.030	5,438
	Resort Beach	3.330	17,600
	Resort Beach, North	2.670	14,080
Virginia Beach	Total:	13.05	68,904
West Point	Beach Park	0.01	50
York	Yorktown Beach	0.23	1,215
Totals:	16	38.81	204,876

*Public beaches as defined under the Public Beach Conservation and Development Act.

Fishing

Fishing is ranked seventh in the 2006 VOS. Each year more than 721,000 freshwater anglers and 384,000 saltwater anglers spend some 14.5 million days fishing Virginia's 2,800 miles of coldwater streams, 25,000 miles of fishable warm water streams, 13,400 acres of public small impoundments, 139,100 acres of public large impoundments, 1.5 million acres on the Chesapeake Bay, and 5,300 miles of ocean shoreline. In Virginia, anglers boost the economy by spending \$640,728,000 annually. Recreational fishing accounts for a total annual economic output of \$1,213,253,000, supporting 11,238 jobs with \$278,441,000 in earnings.

Public fishing piers

DGIF, DCR, U.S. Forestry Service, U.S. Fish and Wildlife Service, National Park Service, county and city

governments, conservation organizations and private entities have all teamed up to help create a statewide network of assessable fishing piers and platforms at 51 different lakes and streams. These sites offer access to public waters ranging from mountain top trout streams to expansive tidal rivers. For a list of accessible public boat access areas and fishing piers and platforms, go to: www.dgif.virginia.gov/fishing/accessible.

Bank fishing

Bank fishing doesn't require a boat or fancy fishing equipment. It is one of the most sought after type of water access in Virginia. The simplicity of taking a fishing pole and a can of worms to the shore makes bank fishing affordable and accessible to all Virginians. Anglers will find places to fish banks along shorelines of most public fishing lakes and many



Pier and bank fishing are the most popular ways to fish. Photo of by Virginia Tourism Corporation.

streams and rivers. For more information about freshwater fishing opportunities and facilities on public lakes, streams and rivers, go to the following DGIF website: www.dgif.virginia.gov/fishing. Managers of public water bodies must consider the demand placed on the resource by anglers. Designed bank fishing opportunities not only protect the resource, but also create opportunities for those who don't have boats to access other parts of the water.

Water trails or blueways

Virginia is blessed with hundreds of miles of high quality recreational streams and rivers. Most of the streams that carry enough water to be useful during the prime recreational season are considered by law to be navigable. Navigable waters are public thoroughfares, the highways of the past. Where the lands along these waterways are privately owned, water access is only



The James River Sojourn highlights a popular water trail. Photo by Irvine Wilson.

afforded by land with the permission of the landowner. It is important to stress stewardship of resources and user etiquette along water trails to maintain positive relations with landowners along the trail.

Many people consider any corridor of open water used for recreational travel or string of lakes connected by portage to be a water trail. Camping accessibility by water along the route makes multi-day travel possible. Canoeing, kayaking, and, in some areas, personal-watercraft use are all popular ways to enjoy water trails.

—Roger Moore and Thomas Ross.

Blueways and water trails definition

Blueways and water trails are growing in popularity and becoming valued for their recreational, educational and economic potential. The 2007 VOP uses the term blueway interchangeably with water trail. In *Modern Water Trails Guide* by David Getchell, a water trail is defined as follows:

In contrast with traditional routes that were corridors of commerce and travel, the modern water trail is a recreational waterway on lake, river, or ocean between specific points, continuing access points and day use and/or camping sites for the boating public. A trail may include both public and private lands, with some or all of the latter open only to users specified by the owners. Camping facilities on some water trails may be restricted to those traveling by self-propelled craft while other trails are open to any type of boat. An important ingredient in the concept of the modern water trails, and probably most significant in its long-term effect, is an ethic of low-impact use and personal stewardship of the lands and waters being used.

For example, some riparian lands may not be suitable for outdoor recreation in order for wildlife habitats to be sustained. Sizeable areas of riverside land, or riparian buffers, may function for storm detention and infiltration purposes. When riparian lands are suitable and accessible for outdoor recreation, there will likely be opportunities to link resources along the river or stream with a water trail.

Simply stated, water trails are managed systems of access points and support facilities that allow trail users to plan multi-day trips with assurances that access points, camping sites, rest stops, and re-sup-

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ply sites are clearly identified on maps and on signs visible from the water. Many canoe liveries and outfitters operating in Virginia rent canoes and kayaks and provide transportation to and from access points. Maps help guide the user along water bodies indicating points of interest and support facilities.

The U.S. Congress created the **Captain John Smith Chesapeake National Historic Trail** with more than 2,300 miles of water trail throughout the Bay area. This is the nation's first all-water national historic trail and will commemorate Captain John Smith's 1607-1609 exploration of the Chesapeake Bay. The National Park Service will manage the trail in partnership with the Commonwealth of Virginia and many other organizations. For more information see the National Park Service John Smith Trail website, www.nps.gov/cajo, and the Friends of Captain John Smith Chesapeake National Historic Trail website, www.friendsofthejohnsmithtrail.org.

Virginia's existing Captain John Smith's Adventures on the James River was created by the DCR with the assistance of many partners with funding from the National Park Service Chesapeake Bay Gateways Program and Jamestown 2007. This water trail incorporates a 40-site boating and auto-tour route in the Oxbow Loop, the Cypress Loop and the Oyster Loop. Virginia Tourism Corporation developed a supporting web site to promote local businesses along the trail at www.johnsmithtrail.org.

In addition to the James River trail, the Mattaponi, Pamunkey and York rivers Water Trail, Chickahominy River Water Trail and Rappahannock Water Trail will soon be published to complement plans for the Captain John Smith Chesapeake National Historic Trail.

Benefits of blueways and water trails

Many localities in Virginia have recognized that eco-tourism can be a major contributor to their local economy. To capitalize on their natural assets, such as local river or lake frontage, they are considering blueway projects. The necessary components for a successful blueway are public access points at suitable distances, adequate parking at those access areas, and rest stops with sanitation facilities. Longer trips may require canoe-in campsites, sources of re-supply of water, food and other supplies. Blueway planners need to be sensitive to the concerns of waterfront

property owners to minimize trespassing on private lands. The needs of paddlers and boaters should be addressed at appropriate intervals along the water trail before producing maps or advertising the blueway.

Mapping blueways and water trails

There are two types of water trail maps. At the larger trip planning scale, blueways maps show a large geographic area and highlight the key points of interest. At the more detailed level, blueways maps depict a river segment and show particular aspects of that segment, such as hazards, rapids, portages and points of interest. Detailed trip maps are often produced as a subset of a larger planning map. All maps should consider the types of watercraft, water conditions and potential user conflicts on individual water trails.

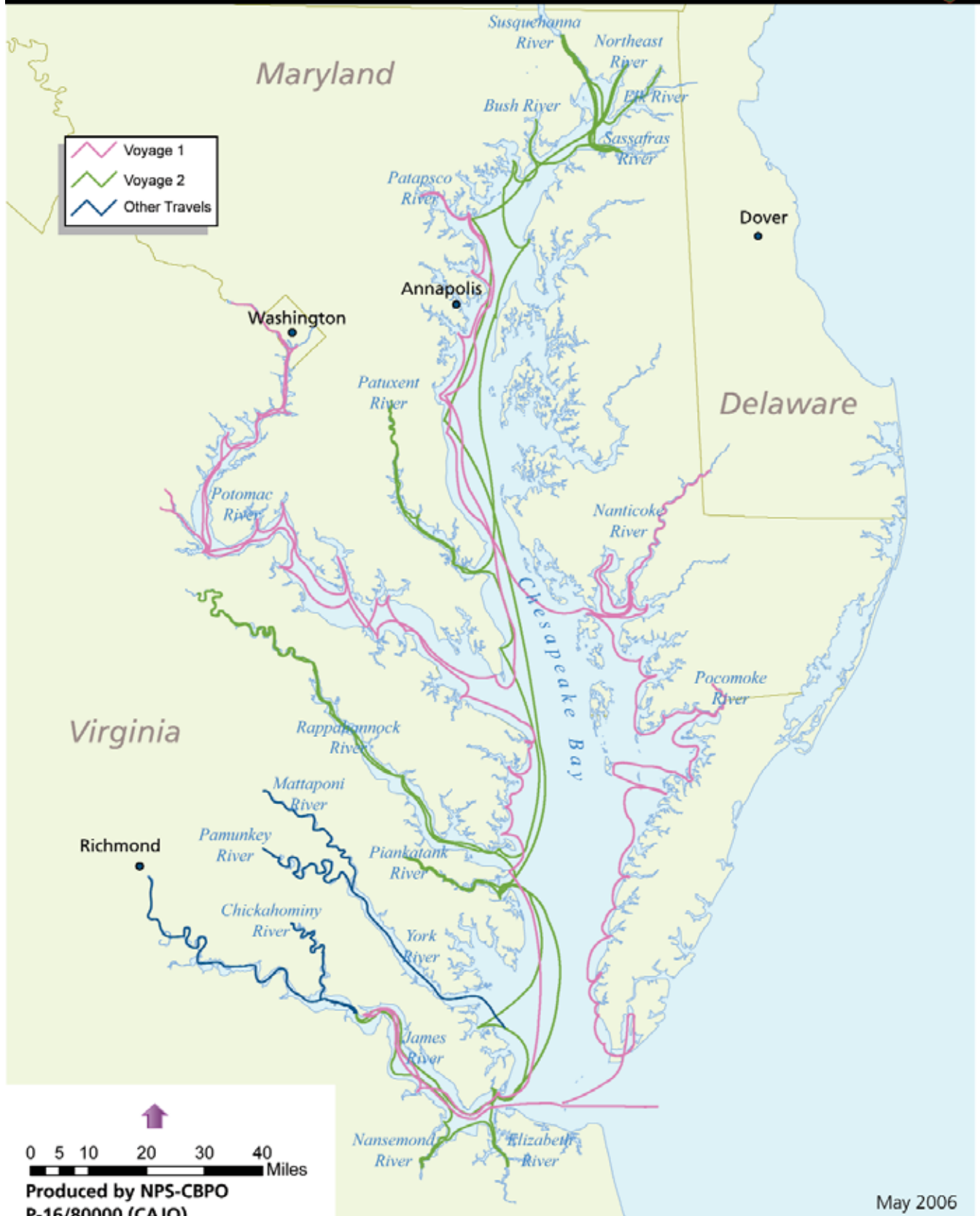
Mapping public access points along river corridors, lake shores and the Chesapeake Bay shoreline identifies opportunities for the establishment of water trails. Many efforts are underway across the state to develop water trails. A list of available water trail maps and projects are shown on Table VII-4 below. Also, water trails and blueways maps show known resources available for outdoor recreation in Virginia.

While there have been many successful blueway mapping projects completed in Virginia, there are many others that could be produced if adequate facilities existed to support the effort. Despite the continuing efforts of DGIF, DCR, local governments and the private sector, there remains a shortage of access points on many good sections of streams. Many of the access points identified in canoeing guides are on private property or at bridge crossings with no authorized access or parking. These "informal" accesses need to be acquired for permanent public use, proper parking, bank stabilization and signage. Likewise, blueway rest stops and camping areas need to be acquired and developed.

DGIF is analyzing the need for improved access and will solicit input from resource agencies and blueway supporters in the development of a State Boating Access Master Plan. An enhanced source for funding acquisition and development of these areas is needed, as is a strong partnership between users, resource agencies, outfitters and local governments to operate, maintain and manage these water trails and the supporting land-based use areas.

Captain John Smith Chesapeake National Historic Trail Map
MD, VA, DE, and DC

National Park Service
U.S. Department of the Interior



Water Access and Blueways

Table VII-4. Water Trails

Water Trail System	Trail Segment	Recreation Region	Existing or Proposed
Algonquin Trace Water Trail	York River	18	Existing
Algonquin Trace Water Trail	Mattaponi River	18	Existing
Algonquin Trace Water Trail	Pamunkey River	18	Existing
Brunswick County Blueways	Meherrin River	13	Proposed
Brunswick County Blueways	Nottoway River	13	Proposed
Captain John Smith Chesapeake National Historic Trail	Captain John Smith's Adventures on the James River	23	Existing
Captain John Smith Chesapeake National Historic Trail	Captain John Smith's Adventures on the Chickahominy River	15	Proposed
Captain John Smith Chesapeake National Historic Trail	Captain John Smith's Adventures on the York, Mattaponi and Pamunkey Rivers	18	Proposed
Captain John Smith Chesapeake National Historic Trail	Captain John Smith's Adventures on the Rappahannock River	17	Proposed
Chesapeake Scenic Waterways	Northwest River	23	Existing
Chesapeake Scenic Waterways	Pocaty Creek	23	Existing
Chesapeake Scenic Waterways	Southern Branch Elizabeth River	23	Existing
Chesapeake Scenic Waterways	Dismal Swamp Canal Trail	23	Existing
Eastern Shore Seaside Water Trail	Raccoon Island Loop	22	Existing
Eastern Shore Seaside Water Trail	Oyster Loop	22	Existing
Eastern Shore Seaside Water Trail	Red Bank Loop	22	Existing
Eastern Shore Seaside Water Trail	Parting Creek Loop	22	Existing
Eastern Shore Seaside Water Trail	Folly Creek Loop	22	Existing
Eastern Shore Seaside Water Trail	Parkers Creek Loop	22	Existing
Eastern Shore Seaside Water Trail	Gargathy Creek Loop	22	Existing
Eastern Shore Seaside Water Trail	Assawoman Creek Loop	22	Existing
Eastern Shore Seaside Water Trail	Toms Cove Loop	22	Existing
Eastern Shore Seaside Water Trail	Fir Landing Loop	22	Existing
Eastern Shore Seaside Water Trail	Fisherman Island Loop	22	Existing
Eastern Shore Seaside Water Trail	Mockhorn Island Loop	22	Existing
Eastern Shore Seaside Water Trail	Red Bank to Willis Wharf	22	Existing
Eastern Shore Seaside Water Trail	Great Machipongo River Loop	22	Existing
Eastern Shore Seaside Water Trail	Folly Creek to Parkers Creek	22	Existing
Eastern Shore Seaside Water Trail	Parkers Creek to Gargathy Creek	22	Existing
Eastern Shore Seaside Water Trail	Gargathy to NASA Dock	22	Existing
Eastern Shore Seaside Water Trail	NASA Docks to Wisharts	22	Existing
Eastern Shore Seaside Water Trail	East Side Landing to Toms Cove	22	Existing
Eastern Shore Seaside Water Trail	Greenbackville Harbor loop	22	Existing
Eastern Shore Seaside Water Trail	ESVNRW to Oyster	22	Existing
Eastern Shore Seaside Water Trail	Oyster Harbor to Red Bank Boat Ramp	22	Existing
Eastern Shore Seaside Water Trail	Wreck Island	22	Existing
Eastern Shore Seaside Water Trail	Willis Wharf Harbor to Quinby Harbor	22	Existing
Eastern Shore Seaside Water Trail	Wachapreague to Folly Creek	22	Existing
Eastern Shore Seaside Water Trail	Quinby Harbor to Wachapreague Town Marina	22	Existing
Eastern Shore Seaside Water Trail	Wisharts Point Landing to Queen Sound Landing	22	Existing
Eastern Shore Seaside Water Trail	Queen Sound Landing to Greenbackville Harbor	22	Existing
Eastern Shore Seaside Water Trail	Gargathy to NASA Dock	22	Existing
Eastern Shore Seaside Water Trail	Greenbackville Harbor to E.A. Vaughn Kayak Trail	22	Existing
Eastern Shore Seaside Water Trail	Chincoteague NWR, Toms Cove to Assateague Island Canoe Trail	22	Existing
Eastern Shore Seaside Water Trail	Curtis Merritt Harbor to Chincoteague National Wildlife Refuge	22	Existing
Eastern Shore Seaside Water Trail	Curtis Merritt Harbor to Queen Sound Landing	22	Existing
Eastern Shore Seaside Water Trail	Wisharts Point Landing to Curtis Merritt Harbor	22	Existing
Eastern Shore Seaside Water Trail	Chincoteague Downtown Park	22	Existing
Franklin County Blueways	Blackwater River	12	Proposed
Franklin County Blueways	Pigg River	12	Proposed

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Water Trail System	Trail Segment	Recreation Region	Existing or Proposed
James River Heritage Trail	Lower James River Trail	23	Existing
James River Heritage Trail	Middle James River Trail	15	Existing
James River Heritage Trail	Upper James River Trail	5	Proposed
Lower Appomattox River Blueway	Appomattox River Canoe Launch to Hopewell Riverside Park	19	Existing
Mathews County Blueway	East River Trail	18	Existing
Mathews County Blueway	New Point Comfort Trail	18	Existing
Mathews County Blueway	Winter and Horn Harbors Trail	18	Existing
Mathews County Blueway	Gwynns Island/Milford Haven Trail	18	Existing
Northern Neck Blueway	Tour of Monroe Bay and the Waterfront of Colonial Beach	17	Existing
Northern Neck Blueway	Headwaters of the Great Wicomico	17	Proposed
Northern Neck Blueway	Upper Reaches of Totusky Creek	17	Existing
Northern Neck Blueway	Fleets Island Water Trail	17	Existing
Pagan River Historic Blueway	Cypress Creek Water Trail	23	Proposed
Pagan River Historic Blueway	Jones Creek Water Trail	23	Proposed
Pagan River Historic Blueway	Pagan River Historic Blueway	23	Proposed
Potomac Heritage National Scenic Trail	Potomac River Water Trail	8	Existing
Potomac Heritage National Scenic Trail	Occoquan Water Trail	16	Existing
Potomac Heritage National Scenic Trail	Aquia Creek Water Trail	16	Proposed
Rappahannock River Water Trail	Rappahannock River Water Trail Guide	9	Existing
Rappahannock River Water Trail	Rapidan River Water Trail Guide	9	Existing
Shenandoah Blueway	North Fork Shenandoah	7	Proposed
Shenandoah Blueway	Shenandoah River	7	Proposed
Shenandoah Blueway	Lower South Fork Shenandoah	7	Proposed
Shenandoah Blueway	Upper South Fork Shenandoah	6	Existing
VA State Park Blueways	Taskinas Creek	18	Existing
VA State Park Blueways	Deep Creek	17	Existing
VA State Park Blueways	Mulberry Creek	17	Existing
Virginia Beach Scenic Waterways	Back Bay	23	Existing
Virginia Beach Scenic Waterways	North Landing River	23	Existing
Virginia Beach Scenic Waterways	West Neck Creek	23	Existing
Virginia Beach Scenic Waterways	Broad Bay	23	Existing
Virginia Beach Scenic Waterways	Rudee Inlet	23	Existing
Virginia Beach Scenic Waterways	North Bay	23	Existing
Virginia Beach Scenic Waterways	Elizabeth River	23	Existing
York County Blueways	Back Creek Park Loop	23	Existing
York County Blueways	New Quarter Park Loop (Queen's Creek)	23	Existing
York County Blueways	Old Wormley Creek Landing Loop (West Branch/Wormley Creeks)	23	Existing
York County Blueways	Smith Landing Loop (Poquoson River)	23	Existing
Individual water trail	Cat Point Creek	17	Proposed
Individual water trail	Cedar Creek	10	Proposed
Individual water trail	Chickahominy Watershed Guide	15	Existing
Individual water trail	Clinch River	1	Proposed
Individual water trail	Dan River	13	Proposed
Individual water trail	Elizabeth River Water Trail	23	Proposed
Individual water trail	Hughlett Point to Dameron Marsh Kayak Trail	17	Proposed
Individual water trail	Jackson River Blueway	7	Proposed
Individual water trail	Maury River	6	Proposed
Individual water trail	New River Water Trail	3	Existing
Individual water trail	North River Historic Homes Water Trail	18	Existing
Individual water trail	Powell River	1	Proposed
Individual water trail	Powhatan Creek Blueway	23	Existing
Individual water trail	Rivanna River Water Trail	10	Existing
Individual water trail	Roanoke River Blueway	5	Proposed
Individual water trail	Roanoke River Blueway	5	Existing
Individual water trail	Staunton River	13	Proposed

[Insert mapVII-3 - Water Trails]

New River Canoe Trail Case Study

The New River Canoe Trail was a joint project of DCR, the North Carolina Department of Natural Resources, the West Virginia Department of Natural Resources, the National Park Service and the U. S. Army Corps of Engineers. The goal was to develop a user-friendly map of the New River from the point of navigation in North Carolina, to the Gauley River Bridge in West Virginia. The National Committee for the New River and the New River Community Partnership played major roles in collecting information and mapping of the corridor. The success of this project was due not only to the rewarding partnership between the government agencies, but also to the support of other governmental and private sector entities critical to providing support facilities and services to trail users. The process used in completing this successful project is outlined below.

- Blueway supporters developed the initial format and criteria for the water trail map.
- Meetings were conducted with local and regional governments and local interest groups to review the proposal and provide input.
- A Memorandum of Agreement was entered into by agency partners that clearly established the intent of the trail and the roles of each agency.
- A practical format for the map was devised. Trails Illustrated agreed to produce and distribute the map. The map identifies all access and use areas in the corridor, important information on safety, accommodations, services, and cultural and natural sites of interest.
- The importance of good stewardship and "Leave No Trace" ethics is stressed on the map.
- To assist map users, important landmarks were noted and GPS coordinates listed for key sites along the trail.
- While not yet published, strip maps of the New River Canoe Trail by segment will be produced at a scale suitable for navigating the many challenging sections of the river.

Copies of the finished map can be purchased from DCR and the other partners, as well as at most outdoor stores that sell Trails Illustrated maps. In addition, technical assistance in the development of water trails is also available. Contact DCR at (804) 786-5046.

The New River is also designated a National Heritage River. This level of designation shows the interest in the resource from various levels.



Canoeing and kayaking are growing in popularity. Photo by Irvine Wilson.

Water trail guiding principles

The North American Water Trails Association (NAWT) is a coalition of organizations and individuals committed to opening recreational access to North America's wealth of waters. NAWT has developed a set of guiding principals for establishing effective water trails, which are outlined below.

Partnerships: cooperating and sharing. A water trail is the product of partnerships among governmental and non-governmental entities with volunteers as the key supporters and advocates of the trail. Together, these groups create and maintain a successful water trail with broad-based and long-term support.

Stewardship: "Leave No Trace". Water trails promote minimum-impact practices that ensure a sustainable future for the waterways and adjacent lands. Water trails embrace the "Leave No Trace Code of Outdoor Ethics" that promotes the responsible use and enjoyment of the outdoors. A trail user who is educated to respect the quality of affected water, land, vegetation and wildlife habitat is a good caretaker.

Volunteerism: experiencing the joy of involvement. Most water trails are created, promoted and maintained through the energy and dedication of local citizens, working individually and through "friends" organizations. Community involvement and volunteerism are the keys to developing a sense of trail stewardship, promoting the trail within the community, encouraging respect for the trail's natural and cultural heritage, and ensuring that local governments support the trail's existence.

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Education: learning by experience. Through comprehensive trail guides, signage, public outreach and informative classes, water trail organizations encourage awareness of the natural, cultural and historical attributes of the trail. Serving as outdoor classrooms, water trails teach through seeing, listening, touching and experiencing.

Conservation: protecting our natural heritage. Water trail activities support the conservation of the aquatic ecosystem and adjacent lands. Trail builders and activists are a respected constituency advocating for resource protection and participating in resource restoration. The water trail community is a watchdog for prevention of environmentally harmful acts, striving to sustain the natural integrity of the trail and preserving the quality of the trail experience.

Community vitality: connecting people and places. A water trail is a network of recreational and educational opportunities. Hiking trails, bikeways, greenways, museums, historic sites, parks and preserves are connected by water trails creating opportunities for exploration, discovery and enrichment. These connections build a sense of place and strengthen community identity.

Diversity: providing opportunities for all: Water trails welcome all those who want to respectfully enjoy and appreciate the trail experience. Broad-based participation in trail activities is achieved through affirmative outreach and recruitment.

Wellness and well-being: caring for self and others: Awareness, education and skills training in health and safety promote the wellness and well-being of all water trail users. Safe use requires a commitment to safe design and sound management.

Resource agencies for water access

Virginia Department of Conservation and Recreation
Division of Planning and Recreation Resources
203 Governor Street, Suite 326
Richmond, Virginia 23219
www.dcr.virginia.gov

Virginia Department of Game and Inland Fisheries
4010 West Broad Street
Richmond, Virginia 23230
www.dgif.virginia.gov

American Canoe Association
www.americancanoe.org

Water Trail Toolbox: How to Plan Build and Manage a Water Trail. www.baygateways.net/watertrailtools.com

References

Getchell, David. 2000. *North American Water Trails: A Guide to Establishing and Maintaining Recreational Waterways on Fresh and Saltwater*. Washington, D.C.: North American Water Trails, Inc.

Roger Moore and Thomas Ross. 1998. *Trails and Recreational Greenways: Corridors of Benefits Parks & Recreation*, January.



Boating and fishing are top ranked recreational activities. Photo by Janit Llewellyn.